



Co-operative Energy Ltd

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Task Force
White Paper on Sustainable Energy Policy
Energy Division
Department of Primary Industries and Energy
GPO Box 858
Canberra
ACT 2601

Dear Mr Phillips,

I am pleased to enclose five copies of our submission on the Green Paper Sustainable Energy Policy For Australia.

Yours in co-operation,

David Griffiths
Secretary

Sustainable Energy and Co-operatives

On the front page

The 1996 Green Paper, Sustainable Energy Policy For Australia, states that its aim "is to establish a framework which will ensure that the Australian energy sector is well placed to capitalize on the economic and environmental opportunities and challenges that will emerge domestically and internationally over the next twenty-five years."

In a foreword to the Green Paper the Australian Government Minister for Resources and Energy, Mr. Warick Parer, states that the Government is concerned "that environmental impacts be kept within acceptable, sustainable bounds and that " The Government's commitment to these goals is underlined by its commitment to formulate a sustainable energy policy for Australia to be laid out in the White Paper in 1997. The essence of, and challenge for, a sustainable energy policy is to effectively integrate economic, social and environmental objectives. This Green Paper is an important step in developing that policy. It is not intended to be prescriptive or definitive. Rather, it identifies relevant issues and suggests a broad strategic framework on which a robust policy can be built. Its purpose is to stimulate public consideration of measures to give effect to a sustainable energy policy."

In responding to Sustainable Energy Policy For Australia, Co-operative Energy Ltd will briefly comment on the following issues:

- Consumer Benefits
- Imperfect Market
- Energy Efficiency
- Environmental Externalities
- Renewable Energy
- Social Equity

Consumer Benefits

On p 3 it is noted that the benefits of the "major process of microeconomic reform of the electricity and gas sectors" includes:

- users of energy having a greater choice of suppliers
- lower costs of energy through greater competition between suppliers
- the ability to make informed decisions based on a more transparent pricing system
- reduced distortions in the market.

It is argued: "These benefits will then flow through to help create a more dynamic and competitive economy. A fully competitive energy sector will provide an opportunity for new technologies, such as renewable energy, co-generation and energy efficiency services to compete with conventional energy sources through reducing barriers to entry and opening up markets."

The benefits of the reform of the energy industry will not automatically flow through to individual small consumers. The capacity to achieve these benefits depends on the purchasing power of consumers. An individual small consumer has limited purchasing power. Historically, however, individual consumers have empowered themselves by forming co-operatives - to aggregate their purchasing power in the market through credit, dispensary, housing and marketing co-operatives. The fundamental purpose of a co-operative providing energy is the same as any other co-operative - to improve the well-being of its members through increased bargaining power e.g. cheaper and better energy services. The capacity of small consumers to benefit from the restructured industry depends on the formation of energy

co-operatives.

Imperfect Market

In 2.4 (p 26) it is noted: "In some circumstances markets are imperfect and may not lead to the most efficient and/or equitable allocation of resources." Contributing factors to the imperfect market are identified as:

- Full cost pricing
- Imperfect information
- Payback period expectations for energy efficiency
- Monopolistic practices

It is noted in 2.4.3 (p 26): "Government intervention to correct market failure may be justified where the benefits of intervention exceed the costs of the intervention. In considering costs and benefits, social, economic and environmental impacts must be recognized. Reflecting these impacts in costs is difficult because many impacts do not have market prices and cannot be easily valued. In addition, the full effects of intervention may be difficult to predict." In 2.4.4 (p 27) it is suggested that two approaches to address market failure are:

- directly, through removal of the cause of the failure
- indirectly, through counteracting the effect of the failure. This may be an option where removal of the cause of the market failure is not feasible. Indirect approaches have to be carefully considered as they may have unintended impacts elsewhere.

Legislators and regulators are primarily relying on market forces to educate, inform and organize consumers i.e. providers competing for consumers will be competitive in the provision of education and information. A key to small consumer choice is value and credible information. Competition between providers does not in itself create choices for all consumers. Private providers have an obligation to maximize dividends for their investor owners rather than provide an energy service to consumers.

The perfect market is a myth. The market is naturally imperfect and the reference to "some circumstances" is a puzzling comment. The reality of the market is that there is asymmetrical information and resources - within and between sellers and buyers. Individual small consumers may understand that they have the choice of seeking an energy provider and service elsewhere but the high transaction costs of obtaining and interpreting this information might makes the exercise of this choice uneconomical and providers may not be interested in their patronage because of low margins.

This is why energy co-operatives are critical to the participation of small consumers in the market. Aggregation is a basic organising imperative for co-operatives - small consumers and producers combining their purchasing power.

Energy Efficiency

In 2.3.27 (p 23) it is suggested "increasing end-use efficiency" is a "major opportunity to reduce emissions of greenhouse gases from the energy sector in the short term." It is subsequently argued in 2.4.7 (p 27) that a key theme relevant to a sustainable energy policy includes driving energy efficiency: "Improving the efficiency with which energy is supplied and used is vital to our economic competitiveness and environmental objectives. Policies and programs to place and maintain all sectors of the Australian economy at the forefront of the world's best practice in energy efficiency is in our national interest."

It is noted in 3.2.24 that despite progress "it is clear that not all cost-effective opportunities for improving

energy efficiency are being taken up, either by businesses or by households." It is observed in 3.2.25 (p 46) that: "A significant driver of energy efficiency over the next few years will be the progressive emergence of the national energy market. Through competition there will be new incentives to minimize costs. In their pursuit of market share, it can be expected that many distributors and retailers of gas and electricity will also become retailers of energy services, providing advice and support to assist their customers to become more energy efficient (thereby retaining customers, but perhaps also avoiding the capital costs of expanding or upgrading their networks). The growth of independent energy service providers, armed with new technologies, performance contracting and third party financing options, can also be expected to drive increasing efficiency, particularly in the commercial and industrial sectors."

The comments are coy in not acknowledging the reality of economically efficient pricing - pricing based on the "costs" of providing services. The pricing regime introduced by the Victorian Government, for instance, is based on regulating retail prices through to 31 December 2000. After this time, there is no price control over retail tariffs except price determination of transmission and distribution charges and the requirement that these determinations must include consideration of "a fair sharing of the benefits achieved through efficiency gains between customers and the distribution companies." Distance-based pricing, for instance, is when tariffs are based on the distance between the generator and the end-user. The longer the distance, the more transmission facilities, the greater the load loss and the "cost" of providing electricity.

Energy efficiency options will become increasing relevant to small consumers but not necessarily available. Energy efficient options could be more readily available to industrial and commercial consumers, rather than small consumers, because of differences in possible cost saving and, therefore, profits for sellers. There could be resistance from retailers to providing affordable energy efficiency programs for small consumers because of the low margins. Through aggregating their loads through co-operatives small consumers could increase the viability of energy efficiency options.

Environmental Externalities

In 3.2.18 (pp 43-44) it is suggested that measures than can apply to reduce the environmental impacts of energy supply and use fall into three broad streams:

- Improving the efficiency of energy supply and use will reduce environmental impacts by reducing the amount of energy used for any given purpose. Improved energy end-use efficiency may involve the use of more efficient equipment to provide the energy needed to achieve the desired service and/or change in system design to require less energy, and/or some degree of behavioral change, for example, changed driving habits. Cost-effective improvements in energy end-use efficiency will, by definition, also improve economic efficiency. Improved efficiencies in the conversion of energy (for example, through improving the efficiency of coal-fired power plants or the increased use of co-generation) will also reduce environmental impacts.
- Switching energy sources where technically and economically feasible can reduce adverse environmental impacts. If the switch is to a less carbon intensive fuel (for example, natural gas rather than coal, renewables instead of fossil fuels), then greenhouse gas emissions will be reduced.
- Environmental impacts can be reduced by removing pollutants from exhaust gases. This approach has been adopted to reduce emissions of pollutants such as ash from power stations and pollutants from motor vehicles.

It is noted in 1.2.4 (p 10) that "not all costs are currently reflected in energy prices. For example, environmental externalities (which are difficult, if not impossible to value in any precise way) may not always be reflected in energy prices. To the extent practicable, such costs ought to be so reflected." Subsequently , in 2.2.7 (p 15) the sources of these environmental externalities are clearly identified:

31% Manufacturing
30% Road transport
12% Residential
11% Agriculture, Mining and Construction
8% Other transport
6% Commercial and Services
2% Other

The logic of full cost pricing is that environment externalities are reflected in pricing.

Renewable Energy

It is noted in 3.3.12 (p 55) that the Australian renewable energy industry has an annual turnover of about \$250 million - with about \$100 million exported. It is noted in 3.3.13 (p 55) "In some circumstances, renewable energy technologies may be the most cost-effective way to supply energy services to isolated areas of Australia and overseas. They, therefore, play a currently limited, but important role in meeting society's needs." It is also noted in 3.3. 14 (p 55) that: "Renewable energy systems generally are characterized by high to very high capital costs and very low operating costs."

It is also noted in 3.3.26 (p 57) that: "The Government's approach to facilitating the development of commercially viable renewable energy technologies has been focused on research and development and the reduction of impediments to their use."

It has been noted that energy pricing will eventually be based on economic efficiency principles and this will include distance-sensitive pricing - the longer the distance, the more transmission and distribution facilities, the greater the load loss and the cost of providing power. Because of this Co-operative Energy Ltd believes that the development of new generators closer to load centres and renewable energy options are crucial for isolated areas of Australia and that co-operatives are best placed to provide these options.

Social Equity

In 3.1.30 - 3.1.34 (pp 39-40) there is discussion on community service obligations. It is noted in 3.1.31: "Community service obligations ensure that particular sectors of the Australian community are not severely disadvantaged in regard to the provision of fundamental services. Community service obligations can be met other than through energy prices and some change may occur as a consequence of the reforms currently in train. However, where the provision continues to be in the form of subsidized energy prices they ought to be made more transparent so that appropriate market signals are given. This will provide the incentive for the more efficient delivery of energy services."

Social equity objectives are best achieved through co-operatives - rather than depending on changing governments and their policies. This is not an argument against Government concessions for low income consumers but rather an affirmation of the role of utilities to serve the common good. Co-operatives work for their members and their communities - business techniques serve ethical goals. Co-operative businesses are the most democratic form of business ownership. There is one vote per member irrespective of their shareholding and usage of the co-operative's services. Co-operatives promote self-determination through mutual aid. Co-operatives combine democracy with free enterprise - involving an alternative organizational philosophy, structure and practice. Through co-operatives communities control their own economic institutions and access to services - reducing their dependency on the private and public sectors.

Co-operative Option

Consumer empowerment is when consumers have freedom of choice between providers and services i.e. voluntarily choosing who provides what services.

Co-operative Energy Ltd believes that co-operative involvement in the restructured energy industry is the most effective and efficient way to ensure that small consumers benefit from this restructuring.

Co-operatives are the ideal mechanism for ensuring that the purchasing power of small consumers is maximized. Existing co-operatives and new co-operatives could pool their resources and enterprise.

The genius of co-operatives is that they are ecologically sustainable organizations - a precondition to sustainable energy development. Co-operatives are committed to their members and their communities - to community development. The basis of member ownership is consumers/producers taking responsibility and control for their own destinies.

Because of their nature co-operatives are best placed to capitalise on the economic and environmental opportunities involved in the development of a sustainable energy policy - and practice. Energy co-operatives are well established in the USA with over 1000 electric co-operatives owned by 12 million consumers. In Australia, their development is being actively pursued in at least two states - New South Wales and Victoria. Three energy co-operatives have already been formed in Victoria - Co-operative Energy Ltd, the Orbost Power Co-operative Ltd and Southern Energy Co-operative Ltd. Co-operative Energy Ltd with the Co-operative Federation of Victoria Ltd has formed an Electric Industry Co-operative TaskForce to explore the options for co-operative involvement in the restructured electric industry.

The General Manager of the USA National Rural Electric Co-operative Association, Glenn English, has discussed the similarities of co-operative, investor and municipal utilities in selling electricity to consumers, claiming to provide a prompt and efficient service and taking advantage of new technologies and new business practices. English, then, asked two questions: What makes one provider of electric service fundamentally different from another? What makes rural electric systems different from the IOUs or the municipal utilities. English's answer to what makes co-operatives different is as follows: "What makes us different now is what has made us different since the beginning. We are co-operatives. We are owned by those we serve, and we are locally controlled. We do not exist to maximise return on investment and to build shareholder equity. We are accountable to our customers, not just because it makes good business sense but because we are dependent on them to tell us how they want us to run their business. That is what local control is all about. We are Main Street, not Wall Street. That's what makes us different. That's what makes us strong. That's what gives us a competitive edge."

Further reading

Co-operative Energy Ltd Choice Realities, 1996

Co-operative Energy Ltd Co-operative Power, 1996

Co-operative Energy Ltd What is an electric co-operative? 1996

Co-operative Federation of Victoria Ltd Discussion Paper No 2: Opportunities for Co-operatives in Electricity Industry Restructuring, 1996

Southern Energy Co-operative Ltd The Co-operative Option, 1995



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